

# PRODUCT INFORMATION



## FIBF-d<sub>7</sub> (hydrochloride)

Item No. 22621

**CAS Registry No.:** 2747917-34-4  
**Formal Name:** N-(4-fluorophenyl)-2-(methyl-d<sub>3</sub>)-N-(1-phenethylpiperidin-4-yl)propanamide-

**Synonyms:** 2,3,3,3-d<sub>4</sub> monohydrochloride  
p-FIBF-d<sub>7</sub>, p-fluoro iBF-d<sub>7</sub>,  
p-fluoro Isobutyryl fentanyl-d<sub>7</sub>,  
p-Fluoroisobutyryl fentanyl-d<sub>7</sub>,  
para-FIBF-d<sub>7</sub>, para-fluoro iBF-d<sub>7</sub>,  
para-fluoro Isobutyryl fentanyl-d<sub>7</sub>,  
para-Fluoroisobutyryl fentanyl-d<sub>7</sub>

**MF:** C<sub>23</sub>H<sub>22</sub>D<sub>7</sub>FN<sub>2</sub>O • HCl

**FW:** 412.0

**Chemical Purity:** ≥98% (FIBF)

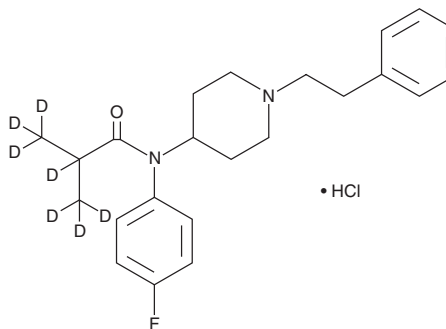
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>7</sub>); ≤1% d<sub>0</sub>

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Description

FIBF-d<sub>7</sub> (hydrochloride) (Item No. 22621) is intended for use as an internal standard for the quantification of FIBF (Item Nos. 19795 | 19313) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

FIBF is categorized as an opioid.<sup>1</sup> It has been associated with fatal multidrug overdoses, as well as overdoses where it was the sole intoxicant responsible for death.<sup>2</sup> FIBF-d<sub>7</sub> is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

## References

1. Hassanien, S.H., Bassman, J.R., Perrien Naccarato, C.M., *et al.* *In vitro* pharmacology of fentanyl analogs at the human mu opioid receptor and their spectroscopic analysis. *Drug Test. Anal.* **12(8)**, 1212-1221 (2020).
2. Pardi, J., Toriello, A., and Cooper, G. Evaluation of 4 fuoroisobutyrylfentanyl in blood samples from 247 authentic cases submitted to the New York City Office of Chief Medical Examiner in 2017–2018. *Forensic Toxicol.* **38**, 340-351 (2020).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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